

American Standard

A36 / A36M-04

Chemical requirement:

Product	Shapes	Plates					Bars			
		To 3/4 [20.] incl.	Over 3/4 to 3/2 [20 to 40], incl.	Over 3/2 to 5/2 [40 to 65], incl.	Over 5/2 to 4 [65 to 100], incl.	Over 4 [100]	To 3/4 [20], incl.	Over 3/4 to 3/2 [20 to 40], incl.	Over 3/2 to 4 [100]. Incl.	Over 4 [100]
Thickness, in. [mm]	All									
Carbon, max, %	0.26	0.25	0.25	0.26	0.27	0.29	0.26	0.27	0.28	0.29
Manganese, %	0.80-1.20	0.80-1.20	0.85-1.20	0.85-1.20	...	0.60-0.90	0.60-0.90	0.60-0.90
Phosphorus, max, &	0.04	0.04	0.40	0.40	0.40	0.40	0.04	0.04	0.04	0.04
Sulfur, max, %	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Silicon, %	0.04 max	0.04 max	0.04 max	0.15-0.40	0.15-0.40	0.15-0.40	0.04 max	0.04 max	0.04 max	0.04 max
Copper, min, % when copper steel is specified	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

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Tensile requirement:

Plate, Shapes, and Bars:	
Tensile strength, ksi [Mpa]	58-80 [400-500]
Yield point, min, ksi [Mpa]	36 [250]
Plates and Bars:	
Elongation in 8 in. [200 mm], min, %	20
Elongation in 2 in. [50 mm], min, %	23
Shapes:	
Elongation in 8 in. [200 mm], min, %	20
Elongation in 2 in. [50 mm], min, %	21